

The opinion in support of the decision being entered today was not written for publication and is *not* binding precedent of the Board.

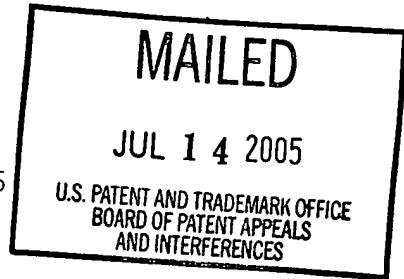
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte ERICH FUCHS

Appeal No. 2005-0960  
Application No. 10/053,166

ON BRIEF



Before WILLIAM F. SMITH, GARRIS and JEFFREY T. SMITH,  
Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 1-8 and 11.

The subject matter on appeal relates to a rubber mixture comprising carboxylated nitrile rubbers, metal salts of an acrylate, liquid acrylates and silanes. This appealed subject matter is adequately illustrated by independent claim 1 which reads as follows:

1. A rubber mixture comprising
  - a) one or more carboxylated nitrile rubbers
  - b) one or more metal salts of an acrylate
  - c) one or more liquid acrylates optionally applied onto a support,
  - d) from 0.01 to 8 phr of one or more silanes, and
  - e) optionally further additives and/or fillers.

The references set forth below are relied upon by the examiner as evidence of obviousness:

Hert et al. (Hert) 5,985,392 Nov. 16, 1999  
Fujii et al. (Fujii) EP 0 933 381 A1 Aug. 4, 1999  
(published European Patent Office Patent Application)

Claims 1-8 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hert in view of Fujii.<sup>1</sup> On page 4 of the answer, the examiner describes his position as follows:

Since peroxides are used to cure the carboxylated nitrile rubber compositions in Hert . . . , one of ordinary skill in the art, having read both references, would have found it obvious to use polyfunctional crosslinking co-agents in the composition of Hert . . . , and the skilled artisan would have expected such an embodiment to work. One would be motivated to modify the art because Fujii . . . teaches and suggests that said polyfunctional crosslinking

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<sup>1</sup>On page 2 of the brief, the appellant states that "[n]one of Claims 1-8 or 11 will be argued separately . . ." and that "[t]herefore, Claims 1-8 and 11 stand or fall together." In light of these statements, we will focus on representative claim 1, the broadest claim on appeal, in assessing the merits of the above noted rejection.

agents, rather than ZnO, are to be used with peroxide crosslinking agents. The combination is obvious because both inventions relate to carboxylated nitrile rubber compositions.

We refer to the brief and to the answer respectively for a thorough exposition of the opposing viewpoints expressed by the appellant and by the examiner concerning this rejection.

OPINION

We will sustain the rejection before us for the reasons expressed in the answer and below.

According to the appellant, "there is no motivation to combine Hert . . . and Fujii . . . and arrive at the instant invention" (brief, page 3). A number of arguments have been advanced in support of this position.

First, the appellant contends that Tables 2 and 4 of the subject specification evince that "the rubber of the claimed invention is much harder than the rubber disclosed in Fujii . . . or Hert . . ." (brief, page 4). This contention is without persuasive merit.

Nothing in representative claim 1 requires that the rubber mixture thereof yield an ultimate product having any particular hardness value much less the specific hardness values of the specific rubber mixtures disclosed in Tables 2 and 4. It is here

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appropriate to emphasize that the rubber mixture defined by claim 1 is considerably broader in scope than the specific mixtures of these tables. Therefore, no factual basis exists for the contention urged by the appellant. On the other hand, a determination that the rubbers of claim 1 and the applied references possess overlapping hardness values is well supported by the fact that common uses for these rubbers (e.g., for making belts or seals) are expressly taught by the appellant (see lines 19-27 on specification page 8), Hert (see lines 25-53 in column 6) and Fujii (see lines 27-35 on page 10).

Additionally, the following argument is presented on page 5 of the brief:

According to the Final Office Action, Fujii . . . teaches the use of liquid acrylates when peroxides are used as crosslinking agents and Zn oxide is reserved for compositions cured with sulfur. Therefore, according to the Final Office Action, one skilled in the art would glean that Hert's teachings of peroxide with Zn oxide is not effective in view of Fujii . . . .

This proposition of taking one teaching as effective and another teaching as in-effective in order to provide motivation and arrive at the instant invention is counterintuitive and would not teach likelihood of success of the present invention, nor would one be motivated to use this backwards teaching to combine these references.

This argument is not convincing because it is based upon an incorrect premise. Contrary to the appellant's belief, there is

nothing in the examiner's rejection or in the disclosure of Fujii which indicates that the combination of peroxide and Zn oxide (as taught by Hert) is not effective.

Rather, the express teaching of Fujii relates to a preference for the combination of peroxide and crosslinking aids which include liquid acrylates of the type here claimed (e.g., trimethylolpropane trimethacrylate and ethylene glycol dimethacrylate; see lines 28-32 on specification page 3). More specifically, Fujii teaches that, "[w]hen an organic peroxide type crosslinking agent is used as a crosslinking agent, it is preferred to use in combination a crosslinking aid such as . . . trimethylolpropane trimethacrylate [and] ethylene glycol dimethacrylate" (sentence bridging pages 9-10; emphasis added). For the reasons fully articulated by the examiner, this explicit teaching of a preference by Fujii would have motivated an artisan to replace the peroxide and zinc oxide combination of Hert's example 4 with the preferred combination of peroxide and, for example, trimethylolpropane trimethacrylate preferred by Fujii.

In light of the foregoing, it is our ultimate determination that the examiner has established a prima facie case of obviousness which the appellant has failed to successfully rebut

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with argument or evidence of nonobviousness. We hereby sustain, therefore, the examiner's Section 103 rejection of all appealed claims as being unpatentable over Hert in view of Fujii. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d, 1443, 1444 (Fed. Cir. 1992).

The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

  
WILLIAM F. SMITH )  
Administrative Patent Judge )  
  
  
BRADLEY R. GARRIS ) BOARD OF PATENT  
Administrative Patent Judge )  
  
  
JEFFREY T. SMITH )  
Administrative Patent Judge ) APPEALS AND  
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BRG:hh

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